

1.0 INTRODUCTION

1.1 General Description

MICRATHERM 3 (MT3) is a low-cost, stand-alone, non-contact thermometer and is part of a wide range of infrared thermometers available from LAND Infrared. The MT3 is designed for OEM and end-user installations. Its linear 4 to 20mA output can be integrated into a monitoring or control loop covering temperatures up to 500°C/1000°F.

The MT3 is housed in a rugged, sealed body allowing operation in a variety of industrial environments. Further protection against harsh environments is offered via a discrete cooling jacket and air purge.

The MT3 can be equipped with a plastic window. This enables temperature measurement in those applications where the use of a glass lens is prohibited as in the food industry.

1.2 Specifications

Temperature ranges:	MT303	0 to 250°C
	MT313	0 to 500°F
	MT323	0 to 500°C
	MT333	0 to 1000°F
Spectral response:	8 to 14 microns	
Response time:	200msec (exponential)	
Nominal field of view:	See Fig. 1	
Accuracy:	±1% of reading or ±1°C/±2°F which ever is greater	
Repeatability:	±0.5% of reading	
Emissivity range:	0.10 to 0.99 in 0.01 increments	
Ambient range:	0 to 50°C/32 to 120°F	
Power requirements:	18 to 40V d.c.	
Maximum loop resistance:	500 ohms	
Housing:	IP65/NEMA 4	
Weight:	0.5 kg/1.2 lbs	
Standard accessories:	Mounting bracket (MTB)	
	4.5m/15 ft cable assembly	
Optional accessories:	Air cooling jacket (MTJ)	
	Air purge (MTP)	
	Right angle viewer (MTR)	
	Sighting aid (MTS)	
	Cable assemblies (other than standard length)	
	Power supply	
	Digital panel meter with integral power supply	